

## SEARCH REQUEST FORM

AccessDB#

109830

Scientific and Technical Information Center

24

Requester's Full Name: TUAN VU Examiner #: 79545 Date: 12-5-03  
 Art Unit: 2124 Phone Number 305 7207 Serial Number: 09 604 987  
 Mailbox and Bldg/Rm Location: SY1G Results Format-Preferred (circle): PAPER  DISK  E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers; and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: BINDING BY HASH

Inventors (please provide full names): PARTHASARATHY, SRIVATSAN  
PRATEEK PRATSCHNER, S, SINCLAIR, C

Earliest Priority Filing Date: 06/28/2000

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Method for facilitating integrity of application program comprising

- (1) providing assembly of manifest containing list of modules that make up the assembly
  - (2) the manifest w/ hash of contents of the modules in the list
  - (3) providing a manifest of an assembly w/ at least one referenced assembly comprising the manifest
  - (4) providing a hash of such manifest w/ at least one referenced assembly
- (1) & (2) are more crucial

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## STAFF USE ONLY

Searcher: David Hollaway  
 Searcher Phone #: 308-774  
 Searcher Location: CPK2 4B3  
 Date Searcher Picked Up: 12- -03  
 Date Completed: 12- -03  
 Searcher Prep & Review Time: 60  
 Clerical Prep Time: \_\_\_\_\_  
 Online Time: .120

## Type of Search

## Vendors and cost where applicable

|                 |                            |
|-----------------|----------------------------|
| NA Sequence (#) | STN                        |
| AA Sequence (#) | Dialog <u>\$ 9.07 /hr.</u> |
| Structure (#)   | Questel/Orbit              |
| Bibliographic   | Dr.Link                    |
| Litigation      | Lexis/Nexis                |
| Fulltext        | Sequence Systems           |
| Patent Family   | WWW/Internet               |
| Other           | Other (specify)            |

Set Items Description  
S1 81965 HASH? OR DIGITAL?()SIGN? OR CHECKSUM? OR CHECK(.)SUM? ? OR -  
MESSAGE()DIGEST()FUNCTION?  
S2 2982633 MODULE? OR APPLICATION? OR COMPONENT? OR SOFTWARE()PROGRAM?  
OR MACHINE()CODE?  
S3 674807 DYNAMIC? OR RUNTIME? OR BINDING? OR HOT OR LIVE OR ON(2N)F-  
LY OR INTERDEPENDENT?  
S4 831108 ASSEMBL? OR METADATA? OR META()DATA OR VERSION?()INFORMATI-  
ON?  
S5 739029 MANIFEST? OR LIST? OR CONTENT? OR INVENTORY OR INVENTORIES  
S6 1 S1 AND S2 AND S3 AND S4 AND S5  
S7 470 S1 AND S2 AND S3  
S8 40 S7 AND (S4 OR S5)  
S9 8 S1(3N)S2(5N)S3  
S10 46 S6 OR S8 OR S9  
S11 18 S10 AND IC=(G06F? OR H04L?)  
S12 18 IDPAT (sorted in duplicate/non-duplicate order)  
S13 18 IDPAT (primary/non-duplicate records only)  
File 347:JAPIO Oct 1976-2003/Aug(Updated 031202)  
(c) 2003 JPO & JAPIO  
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200378  
(c) 2003 Thomson Derwent

13/5/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

015702528 \*\*Image available\*\*  
WPI Acc No: 2003-764721/200372  
Related WPI Acc No: 2001-123032; 2001-123033; 2001-327759; 2001-335326  
XRPX Acc No: N03-612440

Dynamic link library file protection method in computer system,  
involves comparing version number and hash value of replacement version  
of dynamic link library file, with highest version of file installed on  
computer system

Patent Assignee: MICROSOFT CORP (MICK )  
Inventor: JAMAL H M A; KRISHNASWAMI B S; SIKKA A; THOMAS A F  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

| Patent No  | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|------------|------|----------|---------------|------|----------|----------|
| US 6618735 | B1   | 20030909 | US 99141757   | P    | 19990630 | 200372 B |
|            |      |          | US 2000607738 | A    | 20000630 |          |

Priority Applications (No Type Date): US 99141757 P 19990630; US 2000607738  
A 20000630

Patent Details:

| Patent No  | Kind | Lan | Pg          | Main IPC | Filing Notes                        |
|------------|------|-----|-------------|----------|-------------------------------------|
| US 6618735 | B1   | 11  | G06F-015/16 |          | Provisional application US 99141757 |

Abstract (Basic): US 6618735 B1

NOVELTY - A copy of a **dynamic** link library (DLL) file is saved, before performing change including overwriting of the DLL file with a replacement version of the DLL file. The validity of the change to the file is checked, by comparing version number and **hash** value of the replacement version with highest version of file installed on the computer system. If the change is invalid, the change is undone with the stored copy.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) computer-readable medium storing DLL file protection program;
- (2) DLL file updating method; and
- (3) computer-readable medium storing DLL file updating program.

USE - For protecting **dynamic** -link library (DLL) file of computer system.

ADVANTAGE - Prevents unauthorized importation of system files during **application** installation, to prevent invalid system files from being added to the system, effectively.

DESCRIPTION OF DRAWING(S) - The figure shows the operating system, operating system (70)

system file protection (SFP) service (80)  
file system drivers (88)  
protected file list (92)  
temporary directory (96)

pp; 11 DwgNo 2/5

Title Terms: **DYNAMIC** ; LINK; LIBRARY; FILE; PROTECT; METHOD; COMPUTER;  
SYSTEM; COMPARE; VERSION; NUMBER; **HASH** ; VALUE; REPLACE; VERSION;  
**DYNAMIC** ; LINK; LIBRARY; FILE; HIGH; VERSION; FILE; INSTALLATION;  
COMPUTER; SYSTEM

Derwent Class: T01

International Patent Class (Main): G06F-015/16

International Patent Class (Additional): G06F-017/00 ; G06F-017/30

File Segment: EPI

13/5/6 (Item 6 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

014319273 \*\*Image available\*\*  
WPI Acc No: 2002-139975/200218

• XRPX Acc No: N02-105470

Facilitating method for integrity of assembly employable by application programs during runtime providing manifest with a hash of the contents of at least one module of a list of modules

Patent Assignee: MICROSOFT CORP (MICK )

Inventor: PARTHASARATHY S; PRATSCHNER S J; SINCLAIR C T

Number of Countries: 094 Number of Patents: 002

Patent Family:

| Patent No    | Kind | Date     | Applicat No    | Kind | Date     | Week     |
|--------------|------|----------|----------------|------|----------|----------|
| WO 200201351 | A2   | 20020103 | WO 2001US40632 | A    | 20010430 | 200218 B |
| AU 200159808 | A    | 20020108 | AU 200159808   | A    | 20010430 | 200235   |

Priority Applications (No Type Date): US 2000604987 A 20000628

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200201351 A2 E 29 G06F-009/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200159808 A G06F-009/00 Based on patent WO 200201351

Abstract (Basic): WO 200201351 A

NOVELTY - The method involves providing an **assembly** with a **manifest** that contains a **list of modules** that make up the **assembly**. The **manifest** is provided with a **hash** of the **contents** of at least one **module** of the **list of modules**. Providing the **manifest** with a **hash** of the **contents** of at least one **module** of the **list of modules** involves providing the **manifest** with a **hash** of each **module** of the **list of modules** that constitutes the **assembly**.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for a computer readable medium and for a system for facilitating integrity of **assemblies** employable by **application** programs at **runtime**.

USE - For ensuring integrity of **components** employed by **application** programs at **runtime**.

ADVANTAGE - Verifies integrity of **components** at **runtime**.

DESCRIPTION OF DRAWING(S) - The figure shows an **assembly** referencing an **assembly** with multiple modes.

Dwg.1/7

Title Terms: FACILITATE; METHOD; INTEGRITY; ASSEMBLE ; EMPLOY; APPLY; PROGRAM; MANIFEST ; HASH ; CONTENT ; ONE; MODULE ; LIST ; MODULE  
Derwent Class: T01

International Patent Class (Main): G06F-009/00

File Segment: EPI

13/5/7 (Item 7 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014319261 \*\*Image available\*\*  
WPI Acc No: 2002-139963/200218  
XRPX Acc No: N02-105458

Shared software components or assemblies , for application programs, that are provided with security and integrity during runtime by the use of digital signature keys

Patent Assignee: MICROSOFT CORP (MICK )  
Inventor: PARTHASARATHY S; PRATSCHNER S J; SINCLAIR C T  
Number of Countries: 095 Number of Patents: 004  
Patent Family:

| Patent No    | Kind | Date     | Applicat No    | Kind | Date     | Week     |
|--------------|------|----------|----------------|------|----------|----------|
| WO 200201332 | A2   | 20020103 | WO 2001US40634 | A    | 20010430 | 200218 B |
| AU 200159809 | A    | 20020108 | AU 200159809   | A    | 20010430 | 200235   |
| EP 1311920   | A2   | 20030521 | EP 2001933378  | A    | 20010430 | 200334   |
|              |      |          | WO 2001US40634 | A    | 20010430 |          |
| BR 200112106 | A    | 20031028 | BR 200112106   | A    | 20010430 | 200374   |
|              |      |          | WO 2001US40634 | A    | 20010430 |          |

Priority Applications (No Type Date): US 2000605602 A 20000628

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
WO 200201332 A2 E 37 G06F-001/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW  
AU 200159809 A G06F-001/00 Based on patent WO 200201332  
EP 1311920 A2 E G06F-001/00 Based on patent WO 200201332  
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR  
BR 200112106 A G06F-001/00 Based on patent WO 200201332

Abstract (Basic): WO 200201332 A

NOVELTY - A published assembly name is unique because it is published with a publisher's public key. This prevents others from publishing an updated version of the assembly that claims to be published from the same publisher, as they do not have a matching private key.

USE - For application programs.

ADVANTAGE - Prevents name spoofing.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram of an assembly referencing an assembly having multiple modules .

First assembly 10

Module 14

Second assembly 20

Dwg.1/10

Title Terms: SHARE; SOFTWARE; COMPONENT ; ASSEMBLE ; APPLY; PROGRAM; SECURE; INTEGRITY; DIGITAL; SIGNATURE; KEY

Derwent Class: T01

International Patent Class (Main): G06F-001/00

File Segment: EPI

13/5/9 (Item 9 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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013491749 \*\*Image available\*\*  
WPI Acc No: 2000-663692/200064  
Related WPI Acc No: 1998-542869  
XRPX Acc No: N00-491718

Object synchronization in multiprocessor system, involves searching preset synchronization construct using global data structure, when local data structure does not contain data referring to preset construct  
Patent Assignee: SUN MICROSYSTEMS INC (SUNM )  
Inventor: LINDHOLM T G  
Number of Countries: 001 Number of Patents: 001  
Patent Family:  
Patent No Kind Date Applcat No Kind Date Week  
US 6108754 A 20000822 US 97832090 A 19970403 200064 B  
US 9853911 A 19980402

Priority Applications (No Type Date): US 9853911 A 19980402; US 97832090 A 19970403

Patent Details:

| Patent No  | Kind | Lan | Pg | Main IPC    | Filing Notes   |
|------------|------|-----|----|-------------|--|
| US 6108754 | A    | 19  |    | G06F-012/08 | CIP of application US 97832090<br>CIP of patent US 5875461 |

Abstract (Basic): US 6108754 A

NOVELTY - Local data structure that is part of thread-local cache assigned to thread, is searched using **hash** value, for data referring to a specific synchronization construct associated with object. If the local data structure does not contain reference data, then the specific synchronization construct is searched using a global data structure containing data associating objects with synchronization constructs.

DETAILED DESCRIPTION - When searching the local data structure, an in-progress reference is set to indicate an identity of object. The termination of association between object and specific synchronization construct is prevented, when in-progress reference identifies the object. The local data structure is searched for reference data using **hash** value produced by applying data identifying object to a **hash** function. INDEPENDENT CLAIMS are also included for the following:

- (a) object synchronizing program with thread;
- (b) computer system

USE - Used in multiprocessor computer system to manage **dynamic** association between objects and broad category of synchronization constructs e.g. mutexes, monitors, semaphores to synchronize objects with threads.

ADVANTAGE - Manages the **dynamic** association between objects and synchronization constructs through the use of local data structures in thread local cache. Data structures that are part of thread local cache need not be locked before the thread accesses the data structure. Thus, overhead and **contention** resulting from looking-up synchronization constructs using global data structures that are protected by global locks, is avoided.

DESCRIPTION OF DRAWING(S) - The figure shows block diagram of object synchronization **module**.

pp; 19 DwgNo 3/6

Title Terms: OBJECT; MULTIPROCESSOR; SYSTEM; SEARCH; PRESET; CONSTRUCTION; GLOBE; DATA; STRUCTURE; LOCAL; DATA; STRUCTURE; CONTAIN; DATA; REFER; PRESET; CONSTRUCTION

Derwent Class: T01

International Patent Class (Main): G06F-012/08

File Segment: EPI

| Set   | Items   | Description   |
|---|---------|---|
| S1  | 81965   | HASH? OR DIGITAL?()SIGN? OR CHECKSUM? OR CHECK()SUM? ? OR -<br>MESSAGE()DIGEST()FUNCTION? |
| S2  | 2982633 | MODULE? OR APPLICATION? OR COMPONENT? OR SOFTWARE()PROGRAM?<br>OR MACHINE()CODE?          |
| S3  | 674807  | DYNAMIC? OR RUNTIME? OR BINDING? OR HOT OR LIVE OR ON(2N)F-<br>LY OR INTERDEPENDENT?      |
| S4  | 831108  | ASSEMBL? OR METADATA? OR META()DATA OR VERSION?()INFORMATI-<br>ON?                        |
| S5  | 739029  | MANIFEST? OR LIST? OR CONTENT? OR INVENTORY OR INVENTORIES                                |
| S6  | 1       | S1 AND S2 AND S3 AND S4 AND S5  |
| S7  | 470     | S1 AND S2 AND S3  |
| S8  | 40      | S7 AND (S4 OR S5)   |
| S9  | 8       | S1(3N)S2(5N)S3  |
| S10   | 46      | S6 OR S8 OR S9  |
| S11   | 18      | S10 AND IC=(G06F? OR H04L?)   |
| S12   | 18      | IDPAT (sorted in duplicate/non-duplicate order)   |
| S13   | 18      | IDPAT_ (primary/non-duplicate records only)   |
| S14   | 61767   | MC=(T01-E04 OR T01-J20A OR T01-J20B2A OR T01-S03)   |
| S15   | 15      | S14 AND S7  |
| S16   | 10      | S15 NOT S10   |
| S17   | 9       | S16 AND IC=(G06F? OR H04L? OR H04N?)  |
| File 347:JAPIO Oct 1976-2003/Aug (Updated 031202) |         |   |
| (c) 2003 JPO & JAPIO                              |         |   |
| File 350:Derwent WPIX 1963-2003/UD,UM &UP=200378  |         |   |
| (c) 2003 Thomson Derwent                          |         |   |

17/5/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015683545 \*\*Image available\*\*

WPI Acc No: 2003-745734/200370

XRPX Acc No: N03-597432

**Signed binary description file generation method for computer network, involves associating module license information with hash of corresponding module and related information with corresponding unique identification names**

Patent Assignee: ROBBINS V L (ROBB-I); ROTHROCK L V (ROTH-I); ROZAS C V (ROZA-I)

Inventor: ROBBINS V L; ROTHROCK L V; ROZAS C V

Number of Countries: 001 Number of Patents: 001

Patent Family:

|                |      |          |               |      |          |        |     |
|----------------|------|----------|---------------|------|----------|--------|-----|
| Patent No.     | Kind | Date     | Applicat No   | Kind | Date     | Week   | ... |
| US 20030159055 | A1   | 20030821 | US 2001967738 | A    | 20010928 | 200370 | B   |

Priority Applications (No Type Date): US 2001967738 A 20010928

Patent Details:

|                |      |        |             |              |
|----------------|------|--------|-------------|--------------|
| Patent No      | Kind | Lan Pg | Main IPC    | Filing Notes |
| US 20030159055 | A1   | 12     | H04L-009/32 |              |

Abstract (Basic): US 20030159055 A1

NOVELTY - Several set of **module** license information and unique identification (ID) names for related program, plug-in, verification agent, code and **dynamic modules** are received. Each ID name corresponds to set of license information including **hash** of corresponding **module** and related information signed with a key. The license information is associated with corresponding ID name, and stored in signed binary description file as associated pairs.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) software system integrity verification method;
- (2) verification system; and
- (3) computer readable medium storing software system integrity verification process.

USE - For generating signed binary description file for multiple **modules** such as program **module**, plug-in **module**, verification agent, code and **dynamic modules** used in network computer system and public network such as Internet.

ADVANTAGE - Verifies the integrity of the system with multiple **components** and reduces the expense of signature verification. Manages the binary description files for each **components**, adds complexity and overhead to normal software operation.

DESCRIPTION OF DRAWING(S) - The figure shows a flow diagram of the signed binary description file generation process.

pp; 12 DwgNo 1/4

Title Terms: SIGN; BINARY; DESCRIBE; FILE; GENERATE; METHOD; COMPUTER; NETWORK; ASSOCIATE; **MODULE**; LICENCE; INFORMATION; HASH; CORRESPOND; **MODULE**; RELATED; INFORMATION; CORRESPOND; UNIQUE; IDENTIFY; NAME

Derwent Class: T01

International Patent Class (Main): H04L-009/32

File Segment: EPI

17/5/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015387383 \*\*Image available\*\*

WPI Acc No: 2003-448328/200342

XRPX Acc No: N03-357634

**Processor enumeration method involves starting processors in compute node, based on operating system activation request**

Patent Assignee: CROSSLAND J B (CROS-I); KAUSHIK S D (KAUS-I); KUMAR M J

(KUMA-I); O'SHEA D J (OSHE-I); RANKIN L J (RANK-I); INTEL CORP (ITLC )  
Inventor: CROSSLAND J B; KAUSHIK S D; KUMAR M J; O'SHEA D J; RANKIN L J;  
CROSSLAND J; KAUSHIK S; KUMAR M; O'SHEA D; RANKIN L  
Number of Countries: 101 Number of Patents: 002  
Patent Family:  
Patent No Kind Date Applcat No Kind Date Week  
US 20030065752 A1 20030403 US 2001971211 A 20011003 200342 B  
WO 200329993 A2 20030410 WO 2002US31327 A 20020930 200342

Priority Applications (No Type Date): US 2001971211 A 20011003

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20030065752 A1 28 G06F-015/177

WO 200329993 A2 E G06F-013/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW

Abstract (Basic): US 20030065752 A1

NOVELTY - Several processors are enumerated to a system architecture operating system in which the compute node is hot plugged, in response to a hot-plug reset. The processors in the compute node are started in response to an operating system activation request.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) recorded medium storing the processor enumeration program;
- (2) processor enumeration apparatus; and
- (3) processor enumeration system.

USE - For enumeration of processors in compute node, and also for handheld devices, digital signal processing devices, network PCs, mini computers and main frame computers.

ADVANTAGE - Enables device enumeration in an advanced configuration and power management interface (ACPI) mechanisms. Avoids implementation of a new peripheral component interconnect (PCI) definition for supporting hot plug of processor memory node.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart explaining the enumeration of the processors.

pp; 28 DwgNo 8/19

Title Terms: PROCESSOR; METHOD; START; PROCESSOR; COMPUTATION; NODE; BASED; OPERATE; SYSTEM; ACTIVATE; REQUEST

Derwent Class: T01; U22

International Patent Class (Main): G06F-013/00 ; G06F-015/177

International Patent Class (Additional): G06F-007/38

File Segment: EPI

17/5/3 (Item 3 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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014584678 \*\*Image available\*\*

WPI Acc No: 2002-405382/200243

Related WPI Acc No: 2000-543286; 2002-226031; 2002-350629; 2002-706169; 2003-090419

XRPX Acc No: N02-318243

Universal signature object for digital data e.g. for computer systems, where universal signature object binds a digital signature to digital data regardless of the file format of the version of the digital data

Patent Assignee: PRIVATE EXPRESS TECHNOLOGIES PTE LTD (PRIV-N); FONG K (FONG-I); MADHAV R M (MADH-I); TEO K (TEOK-I); TOH E (TOHE-I)

Inventor: FONG K; MADHAV R M; TEO K; TOH E; MAHARJAN M R

Number of Countries: 097 Number of Patents: 004

Patent Family:

| Patent No  | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|--|------|----------|---------------|------|----------|----------|
| WO 200233524   | A1   | 20020425 | WO 2001SG211  | A    | 20011017 | 200243 B |
| US 20020048372   | A1   | 20020425 | US 2000242013 | P    | 20001019 | 200243   |
|  |      |          | US 2000242113 | P    | 20001019 |          |
|  |      |          | US 2001981588 | A    | 20011016 |          |
| AU 200211192   | A    | 20020429 | AU 200211192  | A    | 20011017 | 200255   |
| AU 200211195   | A    | 20020429 | AU 200211195  | A    | 20011018 | 200255   |
| Priority Applications (No Type Date): US 2000242113 P 20001019; US 2000242013 P 20001019; US 2001981588 A 20011016; US 2000242014 P 20001019 |      |          |               |      |          |          |
| ; US 2000242015 P 20001019; US 2001887157 A 20010621   |      |          |               |      |          |          |

**Patent Details:**

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200233524 A1 E 45 G06F-001/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

US 20020048372 A1 H04L-009/00 Provisional application US 2000242013

Provisional application US 2000242113

AU 200211192 A G06F-001/00 Based on patent WO 200233524

AU 200211195 A H04L-012/00 Based on patent WO 200233891

**Abstract (Basic):** WO 200233524 A1

**NOVELTY** - Computer-readable medium stores a universal signature object for binding a digital signature to digital data, comprises: one version of the digital data, where each version has a file format; a digital signature of signature data, where the signature data is a function of the digital data; and information concerning an application compatible with the file format of the versions.

**DETAILED DESCRIPTION - INDEPENDENT CLAIM** included for the following:universal signature object viewer; method for digitally signing digital data; signing program

**USE** - For computer systems.

**ADVANTAGE** - Provides a universal signature object that can bind digital signatures to digital data, regardless of the file format. With such an object, people and businesses could more easily exchange documents and countersign data, such as contracts, without reverting to hard copies. Furthermore, with such an object, the digital data and all digital signatures can easily be archived.

**DESCRIPTION OF DRAWING(S)** - The diagram shows a universal signature object.

pp; 45 DwgNo 1/7

Title Terms: UNIVERSAL; SIGNATURE; OBJECT; DIGITAL; DATA; COMPUTER; SYSTEM; UNIVERSAL; SIGNATURE; OBJECT; BIND; DIGITAL; SIGNATURE; DIGITAL; DATA; FILE; FORMAT; VERSION; DIGITAL; DATA

Derwent Class: T01; W01

International Patent Class (Main): G06F-001/00 ; H04L-009/00 ; H04L-012/00

File Segment: EPI

17/5/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014403269 \*\*Image available\*\*

WPI Acc No: 2002-223972/200228

XRPX Acc No: N02-171441

Instruction processing method for digital data processor, involves compiling identified pipeline dependencies in multiple instructions and field of code block to control hardware-based dependency checking

Patent Assignee: LUCENT TECHNOLOGIES INC (LUCE )

Inventor: BATTEEN D; D'ARCY P G; GLOSSNER C J; JINTURKAR S; THILO J; VASSILIADIS S; WIRES K E

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| US 6260189 | B1   | 20010710 | US 98152744 | A    | 19980914 | 200228 B |

Priority Applications (No Type Date): US 98152744 A 19980914

Patent Details:

| Patent No  | Kind | Lan | Pg | Main IPC    | Filing Notes |
|------------|------|-----|----|-------------|--------------|
| US 6260189 | B1   | 9   |    | G06F-009/44 |              |

Abstract (Basic): US 6260189 B1

NOVELTY - Pipeline dependencies in multiple instructions are identified and instructions are grouped into code block having a field which indicates types of pipeline dependencies. The identification and grouping steps are implemented in a compiler (104) in conjunction with compilation of instructions and field of code block to control application of hardware-based dependency checking in processor (108).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Instructions processing apparatus;
- (b) Machine readable medium

USE - For pipelined microprocessors and digital data processors e.g. central processing unit, very long instruction word processor, single issue processor, digital signal processors, application specific integrated circuit (ASIC), personal computer, mainframe computer, network computer, workstation and servers.

ADVANTAGE - Allows a compiler to reduce the number of instruction stalls that arises due to execution unit latencies in a pipeline processor with the help of compiler controlled dynamic dispatch (CCDD). Decreases the execution time of given program, as well as the amount of required checking and renaming hardware, with only minimal increase in code size and complexity. Enables or disables hardware pipeline checking effectively to reduce unnecessary stalling.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of processing system.

Compiler (104)  
Processor (108)  
pp; 9 DwgNo 6/12

Title Terms: INSTRUCTION; PROCESS; METHOD; DIGITAL; DATA; PROCESSOR; COMPILE; IDENTIFY; PIPE; MULTIPLE; INSTRUCTION; FIELD; CODE; BLOCK; CONTROL; HARDWARE; BASED; DEPEND; CHECK

Derwent Class: T01

International Patent Class (Main): G06F-009/44

File Segment: EPI

17/5/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014086292 \*\*Image available\*\*

WPI Acc No: 2001-570506/200164

Related WPI Acc No: 2001-483510; 2003-831752

XRPX Acc No: N01-425187

Data storage controller in computer system, instantiates disk interface and bus interface for interfacing data storage controller to data storage device and to host respectively, using programmable logic device

Patent Assignee: REALTIME DATA LLC (REAL-N); BUCK J (BUCK-I); FALLON J J (FALL-I); MCERLAIN S J (MCER-I); PICKEL P F (PICK-I)

Inventor: BUCK J; FALLON J J; MCERLAIN S J; PICKEL P F; WOLF-SONKIN Y

Number of Countries: 089 Number of Patents: 004

Patent Family:

| Patent No      | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|----------------|------|----------|---------------|------|----------|----------|
| WO 200157642   | A2   | 20010809 | WO 2001US3711 | A    | 20010205 | 200164 B |
| AU 200136677   | A    | 20010814 | AU 200136677  | A    | 20010205 | 200173   |
| EP 1179194     | A1   | 20020213 | EP 2001908852 | A    | 20010205 | 200219   |
|                |      |          | WO 2001US3711 | A    | 20010205 |          |
| US 20020069354 | A1   | 20020606 | US 2000180114 | P    | 20000203 | 200241   |

Priority Applications (No Type Date): US 2001776267 A 20010202; US 2000180114 P 20000203; US 2001775905 A 20010202

## Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
WO 200157642 A2 E 56 G06F-003/06

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200136677 A G06F-003/06 Based on patent WO 200157642

EP 1179194 A1 E G06F-003/06 Based on patent WO 200157642

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

US 20020069354 A1 G06F-009/00 Provisional application-US-2000180114

## Abstract (Basic): WO 200157642 A2

NOVELTY - A programmable logic device (22) is programmed by a digital signal processor (DSP) (21) to instantiate a disk interface (14) and a bus interface (15) for interfacing the data storage controller to a data storage device and to a host respectively. A non-volatile memory device stores logic codes associated with the DSP and the interfaces.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Operating system loading method;
- (b) Application program launching method

USE - For controlling storage and retrieval of data to and from data storage device including pseudo random, random access storage device, magnetic and optical tapes, magnetic and optical disk drives, synchronous dynamic random access memory (SDRAM) in computer system. Also for operating system loading and application program launching in computer system in home, business and scientific computing application.

ADVANTAGE - Storage bandwidth is increased effectively without decreasing data storage and retrieval rates.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of data storage controller.

- Disk interface (14)
- Bus interface (15)
- Digital signal processor (21)
- Programmable logic device (22)

pp; 56 DwgNo 2/10

Title Terms: DATA; STORAGE; CONTROL; COMPUTER; SYSTEM; DISC; INTERFACE; BUS ; INTERFACE; INTERFACE; DATA; STORAGE; CONTROL; DATA; STORAGE; DEVICE; HOST; RESPECTIVE; PROGRAM; LOGIC; DEVICE

Derwent Class: T01

International Patent Class (Main): G06F-003/06 ; G06F-009/00

International Patent Class (Additional): G06F-009/24 ; G06F-009/445 ;  
G06F-015/177

File Segment: EPI

17/5/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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013733879 \*\*Image available\*\*

WPI Acc No: 2001-218109/200122

Related WPI Acc No: 2002-395979

XRPX Acc No: N01-155497

Application specific waveform generator for electronic test equipment, converts digital signals to analog pulses representing actual physical waveforms through use of mathematical modeling of physical system

Patent Assignee: ASTEC INT LLC (ASTE-N)  
Inventor: CAMPBELL R O; SESHAN C  
Number of Countries: 019 Number of Patents: 002  
Patent Family:

| Patent No    | Kind | Date     | Applicat No    | Kind | Date     | Week     |
|--------------|------|----------|----------------|------|----------|----------|
| WO 200067068 | A2   | 20001109 | WO 2000US11935 | A    | 20000503 | 200122 B |
| US 6397173   | B1   | 20020528 | US 99304484    | A    | 19990503 | 200243   |

Priority Applications (No Type Date): US 99304484 A 19990503

Patent Details:

| Patent No    | Kind | Lan Pg | Main IPC       | Filing Notes |
|--------------|------|--------|----------------|--------------|
| WO 200067068 | A2   | E      | 49 G02F-000/00 |              |

| Designated States (Regional): |            | AT BE CH CY DE DK ES FI FR GB GR IE IT LU |
|-------------------------------|------------|---|
| MC NL PT SE                   | US 6397173 | B1  |

Abstract (Basic): WO 200067068 A2

NOVELTY - A processor including a mathematical model of a disk drive system controls the device. User interface enables user to communicate with the device, passing data between user and processor. Signal generator receives input signals from processor relating to mathematical model, and summer sums together output signal from signal generator and noise generator.

DETAILED DESCRIPTION - The signal generator includes two separate signal generators supplying output signals of same frequency, and interleaved together to create a signal at twice the frequency of the output signals. The output signals are digital, and noise signals from noise source are colored. Analog signals created within first frequency range are created at frequencies lower than the first frequency range by repeating portions of the digital output signal, which are repeated by storing output signals in the memory in repetitive fashion. The mathematical model provides a series of input signals to the signal generator and the processor stores certain patterns that are repeated often by the mathematical model in a look-up table.

USE - For user to employ in developing and testing disk drive channel electronics, and can be used for supplying application specific test signals for portions of system under test.

ADVANTAGE - Capable of outputting analog signals for application to the disk drive channel electronics. Using dynamic memory allows for continuous output of signals while creating new signal patterns. A stream of input data can be automatically created by integrated software or through external input from the user

DESCRIPTION OF DRAWING(S) - Drawing shows functional flow chart of the functionality of the test equipment for testing channel circuitry in accordance with the present invention.

pp; 49 DwgNo 7/15

Title Terms: APPLY; SPECIFIC; WAVEFORM; GENERATOR; ELECTRONIC; TEST; EQUIPMENT; CONVERT; DIGITAL; SIGNAL; ANALOGUE; PULSE; REPRESENT; ACTUAL; PHYSICAL; WAVEFORM; THROUGH; MATHEMATICAL; PHYSICAL; SYSTEM

Derwent Class: P81; S01; T01; T03; U23

International Patent Class (Main): G02F-000/00; G06F-009/455

International Patent Class (Additional): G06F-017/50

File Segment: EPI; EngPI

17/5/7 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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013466821 \*\*Image available\*\*

WPI Acc No: 2000-638764/200062

XRPX Acc No: N00-473788

Dynamic class loader in a software environment for the dynamic loading of classes during the execution of program files particularly in a Java processing environment

Patent Assignee: IBM CANADA LTD (IBMC ); INT BUSINESS MACHINES CORP (IBMC )

Inventor: CHAN V S; CHIANG S S; STOKES D K; THEIVENDRA L W

Number of Countries: 002 Number of Patents: 002  
Patent Family:  
Patent No Kind Date Applcat No Kind Date Week  
CA 2255042 A1 20000530 CA 2255042 A 19981130 200062 B  
US 6470494 B1 20021022 US 99450205 A 19991129 200273

Priority Applications (No Type Date): CA 2255042 A 19981130  
Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
CA 2255042 A1 E 23 G06F-009/445  
US 6470494 B1 G06F-009/45  
Abstract (Basic): CA 2255042 A1  
NOVELTY - A **dynamic** class loader (40) is used in conjunction with a default class loader (30) to load a class into a memory (28) in a form suitable for interpretation by a Java interpreter (26). The class loader maintains a set of pointers to the classes that have already been loaded for interpretation and the pointers are stored in a **hash** table and are indexed by class name. The class loader also works in conjunction with one or more byte representations of class files (42) provided by the user of an **application** and a second **hash** table is used to store pointers to these representations, indexed by class name.  
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for a method of loading a class in executable form and for a method of loading files.  
USE - **Dynamic** loading of classes during execution of program files.  
ADVANTAGE - Greater flexibility in use and design of programs.  
DESCRIPTION OF DRAWING(S) - The drawing is a schematic illustration of the present invention in a preferred embodiment  
Dynamic class loader (40)  
Default class loader (30)  
Memory (28)  
Java interpreter (26)  
Class files (42)  
Pp; 23 DwgNo 2/3

Title Terms: **DYNAMIC** ; CLASS; LOAD; SOFTWARE; ENVIRONMENT; **DYNAMIC** ; LOAD ; CLASS; EXECUTE; PROGRAM; FILE; PROCESS; ENVIRONMENT  
Derwent Class: T01  
International Patent Class (Main): G06F-009/445 ; G06F-009/45  
International Patent Class (Additional): G06F-009/45  
File Segment: EPI

17/5/8 (Item 8 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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013466820 \*\*Image available\*\*  
WPI Acc No: 2000-638763/200062  
XRPX Acc No: N00-473787  
Archiving tool for archiving files in an archive file that provides customized entry names for the archived files  
Patent Assignee: IBM CANADA LTD (IBMC ); INT BUSINESS MACHINES CORP (IBMC )  
Inventor: CHAN V S; CHIANG S S; STOKES D K; THEIVENDRA L W  
Number of Countries: 002 Number of Patents: 003  
Patent Family:  
Patent No Kind Date Applcat No Kind Date Week  
CA 2255035 A1 20000530 CA 2255035 A 19981130 200062 B  
CA 2255035 C 20020129 CA 2255035 A 19981130 200211  
US 6633892 B1 20031014 US 99432865 A 19991102 200368

Priority Applications (No Type Date): CA 2255035 A 19981130  
Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
CA 2255035 A1 E 25 G06F-017/30  
CA 2255035 C E G06F-017/30  
US 6633892 B1 G06F-012/00

**Abstract (Basic):** CA 2255035 A1

**NOVELTY** - A **dynamic** class loader (40) is used in conjunction with a default class loader (30) to load a class into a memory (28) in a form suitable for interpretation by a Java interpreter (26). The class loader maintains a set of pointers to classes that have already been loaded into the memory and the pointers are preferably stored in a hash table and are indexed by class name. The class loader also works in conjunction with one or more byte representations of class files (42) provided by the user or application and a second hash table is used by the class loader to store pointers to these byte representations, which are indexed by class name.

**DETAILED DESCRIPTION** - AN INDEPENDENT CLAIM is included for a method of archiving files.

**USE** - Archiving files in a system providing customized entry names.

**ADVANTAGE** - Enhanced flexibility of use and design of programs.

**DESCRIPTION OF DRAWING(S)** - The drawing is a schematic diagram of the present invention

Dynamic class loader (40)  
Default class loader (30)  
Memory (28)  
Java interpreter (26)  
Class files (42)  
pp; 25 DwgNo 2/3

Title Terms: TOOL; FILE; ARCHIVE; FILE; CUSTOMISATION; ENTER; NAME; FILE  
Derwent Class: T01

International Patent Class (Main): G06F-012/00 ; G06F-017/30

International Patent Class (Additional): G06F-017/00

File Segment: EPI

17/5/9 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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011260450 \*\*Image available\*\*

WPI Acc No: 1997-238353/199722

XRPX Acc No: N97-196880

**Computer system for protecting use of dynamically linked executable modules** - in which program module execution is aborted when procedure call to program module verifier results in verification denial being returned by program module verifier

Patent Assignee: SUN MICROSYSTEMS INC (SUNM )

Inventor: MC MANIS C E

Number of Countries: 010 Number of Patents: 008

Patent Family:

| Patent No   | Kind | Date     | Applicat No | Kind | Date     | Week   |   |
|-------------|------|----------|-------------|------|----------|--------|---|
| EP 770957   | A2   | 19970502 | EP 96307347 | A    | 19961009 | 199722 | B |
| JP 9231068  | A    | 19970905 | JP 96279207 | A    | 19961022 | 199746 |   |
| KR 97022747 | A    | 19970530 | KR 9647605  | A    | 19961023 | 199823 |   |
| US 5757914  | A    | 19980526 | US 95547720 | A    | 19951026 | 199828 |   |
| US 5970145  | A    | 19991019 | US 95547720 | A    | 19951026 | 199950 |   |
|             |      |          | US 97992079 | A    | 19971217 |        |   |
| TW 378304   | A    | 20000101 | TW 96112575 | A    | 19961015 | 200045 |   |
| US 6546487  | B1   | 20030408 | US 95547720 | A    | 19951026 | 200327 |   |
|             |      |          | US 97992079 | A    | 19971217 |        |   |
|             |      |          | US 99420946 | A    | 19991019 |        |   |
| CN 1154515  | A    | 19970716 | CN 96122021 | A    | 19961024 | 200376 |   |

Priority Applications (No Type Date): US 95547720 A 19951026; US 97992079 A 19971217; US 99420946 A 19991019

Cited Patents: No-SR.Pub

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 770957 A2 E 11 G06F-009/445

Designated States (Regional): DE FR GB NL SE

JP 9231068 A 11 G06F-009/06

|             |    |             |  |
|-------------|----|-------------|--|
| KR 97022747 | A  | G06F-009/46 |  |
| US 5757914  | A  | H04L-009/00 |  |
| US 5970145  | A  | H04L-009/00 | Cont of application US 95547720<br>Cont of patent US 5757914   |
| TW 378304   | A  | G06F-009/06 |  |
| US 6546487  | B1 | H04L-009/00 | Cont of application US 95547720<br>Cont of application US 97992079<br>Cont of patent US 5757914<br>Cont of patent US 5970145 |
| CN 1154515  | A  | G06F-015/00 |  |

Abstract (Basic): EP 770957 A

The computer system includes a program **module** verifier and at least two program **modules**, each of which includes a **digital signature** and an executable procedure. The first program **module** also includes a procedure call to the second procedure **module**, a procedure call to the program **module** verifier that is logically positioned in the first program **module** for execution prior to execution of the procedure call to the second program **module**, and instructions preventing execution of the procedure call to the second program **module** when the procedure call to the program **module** verifier results in verification denial being returned by the program **module** verifier.

The second program **module** includes an executable procedure to be performed in response to the procedure call by the first program **module** to the second program **module**, a procedure call to the program **module** verifier that is logically positioned in the second program **module** so as to be executed prior to completion of execution of the second program **module**'s executable procedure, and instructions preventing completion of execution of that executable procedure when the program **module** verifier returns a verification denial with respect to the first program **module**. The program **module** verifier responds to procedure calls by verifying the authenticity of an specified program **module** and by returning a verification confirmation or denial. When the program **module** verifier fails to verify the authenticity of a program **module**, the calling program **module** throws an exception and aborts its execution.

USE - Restricting use of executable **modules** such that each **module** can be **dynamically** linked only to other executable **modules** whose authenticity has been verified.

Dwg.1/3

Title Terms: COMPUTER; SYSTEM; PROTECT; **DYNAMIC** ; LINK; EXECUTE; **MODULE** ; PROGRAM; **MODULE** ; EXECUTE; ABORTION; PROCEDURE; CALL; PROGRAM; **MODULE** ; VERIFICATION; RESULT; VERIFICATION; RETURN; PROGRAM; **MODULE** ; VERIFICATION

Derwent Class: T01

International Patent Class (Main): G06F-009/06 ; G06F-009/445 ; G06F-009/46 ; G06F-015/00 ; H04L-009/00

International Patent Class (Additional): G04F-011/28; G06F-001/00

File Segment: EPI

| Set  | Items   | Description   |
|------|---|---|
| S1   | 103846  | HASH? OR DIGITAL?()SIGN? OR CHECKSUM? OR CHECK()SUM? ? OR -<br>MESSAGE()DIGEST()FUNCTION? |
| S2   | 6652304   | MODULE? OR APPLICATION? OR COMPONENT? OR SOFTWARE()PROGRAM?<br>OR MACHINE()CODE?          |
| S3   | 4100027   | DYNAMIC? OR RUNTIME? OR BINDING? OR HOT OR LIVE OR ON(2N)F-<br>LY OR INTERDEPENDENT?      |
| S4   | 528990  | ASSEMBL? OR METADATA? OR META()DATA OR VERSION?()INFORMATI-<br>ON?                        |
| S5   | 2086147   | MANIFEST? OR LIST? OR CONTENT? OR INVENTORY OR INVENTORIES                                |
| S6   | 5   | S1 AND S2 AND S3 AND S4 AND S5  |
| S7   | 2960  | S1 AND S2 AND S3  |
| S8   | 194   | S7 AND (S4 OR S5)   |
| S9   | 5758  | S1(5N)S2  |
| S10  | 34  | S8 AND S9   |
| S11  | 39  | S6 OR S10   |
| S12  | 32  | RD (unique items)   |
| S13  | 27  | S12 NOT PY>2000   |
| S14  | 27  | S13 NOT PD>20000628   |
| File | 8:Ei Compendex(R) 1970-2003/Nov W4                |   |
|      | (c) 2003 Elsevier Eng. Info. Inc.                 |   |
| File | 35:Dissertation Abs Online 1861-2003/Oct          |   |
|      | (c) 2003 ProQuest Info&Learning                   |   |
| File | 65:Inside Conferences 1993-2003/Nov W5            |   |
|      | (c) 2003 BLDSC all rts. reserv.                   |   |
| File | 2:INSPEC 1969-2003/Nov W4                         |   |
|      | (c) 2003 Institution of Electrical Engineers      |   |
| File | 94:JICST-EPlus 1985-2003/Nov W5                   |   |
|      | (c) 2003 Japan Science and Tech Corp(JST)         |   |
| File | 111:TGG Natl.Newspaper Index(SM) 1979-2003/Dec 04 |   |
|      | (c) 2003 The Gale Group                           |   |
| File | 233:Internet & Personal Comp. Abs. 1981-2003/Jul  |   |
|      | (c) 2003, EBSCO Pub.                              |   |
| File | 144:Pascal 1973-2003/Nov W4                       |   |
|      | (c) 2003 INIST/CNRS                               |   |
| File | 34:SciSearch(R) Cited Ref Sci 1990-2003/Nov W5    |   |
|      | (c) 2003 Inst for Sci Info                        |   |
| File | 62:SPIN(R) 1975-2003/Oct W3                       |   |
|      | (c) 2003 American Institute of Physics            |   |
| File | 99:Wilson Appl. Sci & Tech Abs 1983-2003/Oct      |   |
|      | (c) 2003 The HW Wilson Co.                        |   |

| Set  | Items                              | Description   |
|------|------------------------------------|---|
| S1   | 84427                              | HASH? OR DIGITAL?() (SIGN OR SIGNS OR SIGNING) OR CHECKSUM?<br>OR CHECK()SUM? ? OR MESSAGE()DIGEST()FUNCTION? |
| S2   | 9641721                            | MODULE? OR APPLICATION? OR COMPONENT? OR SOFTWARE()PROGRAM?<br>OR MACHINE()CODE?                              |
| S3   | 5352645                            | DYNAMIC? OR RUNTIME? OR BINDING? OR HOT OR LIVE OR ON(2N)F-<br>LY OR INTERDEPENDENT?                          |
| S4   | 1515452                            | ASSEMBL? OR METADATA? OR META()DATA OR VERSION?()INFORMATI-<br>ON?  |
| S5   | 8865980                            | MANIFEST? OR LIST? OR CONTENT? OR INVENTORY OR INVENTORIES  |
| S6   | 8                                  | S1(4N)S2(S)S3(S)(S4 OR S5)  |
| S7   | 0                                  | S1(10N)S2(10N)S3(10N)S4(S)S5  |
| S8   | 83                                 | S1(S)S2(S)S3(S)(S4 OR S5)   |
| S9   | 29                                 | S1(15N)S2(15N)S3(S)(S4 OR S5)   |
| S10  | 101                                | S6 OR S8 OR S9  |
| S11  | 75                                 | RD (unique items)   |
| S12  | 50                                 | S11 NOT PY>2000   |
| S13  | 45                                 | S12 NOT PD>20000628   |
| File | 275:Gale Group Computer DB(TM)     | 1983-2003/Dec 04<br>(c) 2003 The Gale Group   |
| File | 47:Gale Group Magazine DB(TM)      | 1959-2003/Dec 04<br>(c) 2003 The Gale group   |
| File | 75:TGG Management Contents(R)      | 86-2003/Nov W4<br>(c) 2003 The Gale Group   |
| File | 636:Gale Group Newsletter DB(TM)   | 1987-2003/Dec 04<br>(c) 2003 The Gale Group   |
| File | 16:Gale Group PROMT(R)             | 1990-2003/Dec 04<br>(c) 2003 The Gale Group   |
| File | 624:McGraw-Hill Publications       | 1985-2003/Dec 04<br>(c) 2003 McGraw-Hill Co. Inc  |
| File | 484:Periodical Abs Plustext        | 1986-2003/Nov W5<br>(c) 2003 ProQuest   |
| File | 613:PR Newswire                    | 1999-2003/Dec 05<br>(c) 2003 PR Newswire Association Inc  |
| File | 813:PR Newswire                    | 1987-1999/Apr 30<br>(c) 1999 PR Newswire Association Inc  |
| File | 239:Mathsci                        | 1940-2003/Jan<br>(c) 2003 American Mathematical Society   |
| File | 696:DIALOG Telecom. Newsletters    | 1995-2003/Dec 04<br>(c) 2003 The Dialog Corp.   |
| File | 553:Wilson Bus. Abs. FullText      | 1982-2003/Oct<br>(c) 2003 The HW Wilson Co  |
| File | 621:Gale Group New Prod.Annou.(R)  | 1985-2003/Dec 04<br>(c) 2003 The Gale Group   |
| File | 674:Computer News Fulltext         | 1989-2003/Nov W4<br>(c) 2003 IDG Communications   |
| File | 88:Gale Group Business A.R.T.S.    | 1976-2003/Dec 04<br>(c) 2003 The Gale Group   |
| File | 160:Gale Group PROMT(R)            | 1972-1989<br>(c) 1999 The Gale Group  |
| File | 635:Business Dateline(R)           | 1985-2003/Dec 05<br>(c) 2003 ProQuest Info&Learning   |
| File | 15:ABI/Inform(R)                   | 1971-2003/Dec 05<br>(c) 2003 ProQuest Info&Learning   |
| File | 9:Business & Industry(R)           | Jul/1994-2003/Dec 04<br>(c) 2003 Resp. DB Svcs.   |
| File | 13:BAMP                            | 2003/Nov W4<br>(c) 2003 Resp. DB Svcs.  |
| File | 810:Business Wire                  | 1986-1999/Feb 28<br>(c) 1999 Business Wire  |
| File | 610:Business Wire                  | 1999-2003/Dec 05<br>(c) 2003 Business Wire.   |
| File | 647:CMP Computer Fulltext          | 1988-2003/Nov W5<br>(c) 2003 CMP Media, LLC   |
| File | 98:General Sci Abs/Full-Text       | 1984-2003/Oct<br>(c) 2003 The HW Wilson Co.   |
| File | 148:Gale Group Trade & Industry DB | 1976-2003/Dec 04<br>(c) 2003 The Gale Group   |

| Set | Items | Description   |
|-----|-------|---|
| S1  | 160   | HASH? OR DIGITAL?() (SIGN OR SIGNS OR SIGNING) OR CHECKSUM?<br>OR CHECK()SUM? ? OR MESSAGE()DIGEST()FUNCTION? |
| S2  | 48116 | MODULE? OR APPLICATION? OR COMPONENT? OR SOFTWARE()PROGRAM?<br>OR MACHINE()CODE?                              |
| S3  | 8227  | DYNAMIC? OR RUNTIME? OR BINDING? OR HOT OR LIVE OR ON(2N)F-<br>LY OR INTERDEPENDENT?                          |
| S4  | 2156  | ASSEMBL? OR METADATA? OR META()DATA OR VERSION?()INFORMATI-<br>ON?  |
| S5  | 20522 | MANIFEST? OR LIST? OR CONTENT? OR INVENTORY OR INVENTORIES  |
| S6  | 7     | S1 AND S2 AND S3  |
| S7  | 5     | S6 NOT PY>2000  |
| S8  | 5     | S7 NOT PD>20000628  |

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00102775 DOCUMENT TYPE: Review

PRODUCT NAMES: Microsoft Internet Explorer 4.0 (577375); Netscape Communicator (528463)

TITLE: Microsoft, Netscape Line Up Allies

AUTHOR: Rodriguez, Karen

SOURCE: Interactive Week, v4 n24 p33(2) Jul 21, 1997

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HOMEPAGE: <http://www.interactive-week.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

REVISION DATE: 20020730

...most recent version of the Hypertext Markup Language (HTML) in their browsers. The latest standard, Dynamic HTML, allows new browsers to display animated, textured, layered, and retrieved content without multiple trips...

...new Memphis OS. To improve security, Microsoft is adding Authenticode security technology to IE to digitally sign ActiveX and Java components .